



UNITED STATES DEPARTMENT OF COMMERCE  
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY ROCKET NO.
07/011,024	02/05/87	FIENE	6357 (04)

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JACKSON, EXAMINER	
ART UNIT	PAPER NUMBER
288	3

DATE MAILED: 10/05/87

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892.       | 2. <input checked="" type="checkbox"/> Notice re Patent Drawing, PTO-948.       |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449                        | 4. <input type="checkbox"/> Notice of informal Patent Application, Form PTO-152 |
| 5. <input checked="" type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-18 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-18 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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1. Claim 4 is objected to under 37 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP 608.01(n). Accordingly, the claim has not been further treated on the merits.

2. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-18 are rejected under 35 U.S.C. 103 as being unpatentable over Schneider in view of Conforti.

Schneider discloses an AC powered smoke alarm with continuous back-up battery checking. Conforti teaches a battery powered smoke alarm which periodically loads the battery to measure charge. The load switch is PUT 80. Capacitor 74 is an automatic and periodic actuating switch; PUT 80 is conductive when capacitor 74 charges to a high enough voltage. Capacitor 74 and resistor 78 act as an oscillatory RC timing circuit.

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The test load is resistor 82. An alarm 36 is activated when the voltage falls below a predetermined reference voltage. See column 6, lines 20-54. It would have been obvious to one with ordinary skill in the art to use Conforti's battery checking system in Schneider's apparatus since they both test smoke alarm batteries using PUTS and resistive loads. It would have been obvious to one skilled in the art to use a periodic battery testing system like Conforti's in Schneider's smoke detector to conserve battery change. Disconnecting the AC power supply during the battery test is unnecessary for Schneider because he uses another connection to bypass diode 46 and therefore does not need to forward bias it to actuate the battery. Diode 46 serves to isolate the battery from the AC power source. The length of the period and the level of battery current drawn by the test would have been an obvious matter of engineering design choice.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jarosz discloses a smoke alarm with AC and DC sources and a low DC sensors.

Wittlinger teaches a periodic battery test system for smoke alarms using a test load.

Hopfner discloses a battery checker with a manually operated connection switch.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill D. Jackson whose telephone number is (703) 557-7198.

Serial No. 011,024

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 557-3321.

JDJ J.D. Jackson:vlw

9-30-87

703-557-7198

  
JAMES L. ROWLAND  
Supervisory Patent Examiner  
GROUP ART UNIT 268